Invitation for Public Comment on the List of Candidates for the EPA Science Advisory Board Radiation Advisory Committee June 18, 2013

The U.S. Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office announced in a Federal Register Notice on April 12, 2013 (78 FR 21946-21948) that it was inviting nominations of experts to be considered for the Administrator's appointment to the SAB Radiation Advisory Committee. The SAB Radiation Advisory Committee provides advice to the EPA Administrator, through the chartered SAB, on provides advice on radiation protection, radiation science, and radiation risk assessment. For the Radiation Advisory Committee, the SAB Staff office sought nominations of experts within the disciplines of radiation epidemiology; risk assessment as related to cancer risks from exposures to environmental radiation; and biostatistics.

The SAB Staff Office identified 12 candidates based on their expertise and willingness to serve. We hereby invite public comments on the attached List of Candidates for consideration by the SAB Staff Office. Comments should be submitted to Mr. Edward Hanlon, Designated Federal officer no later than July 18, 2013 at hanlon.edward@epa.gov. E-mail is the preferred mode of receipt. Please be advised that public comments are subject to release under the Freedom of Information Act.

Bernstein, Jonine

Memorial Sloan-Kettering Cancer Center

Dr. Jonine Bernstein, is an Attending Epidemiologist in the Department of Epidemiology and Biostatistics and co-Leader of the Survivor, Outcomes and Risk Program at the Memorial Sloan-Kettering Cancer Center (MSKCC) in New York City. She holds a Ph.D. in Epidemiology from Yale University, an M.S. in Applied Biometry from the University of Southern California, and an A.B. from Brown University. Before joining the faculty at MSKCC, she was Deputy Director of the Division of Epidemiology at Mount Sinai School of Medicine. Dr. Bernstein's core research focus is on breast cancer and gliomas and on understanding cancer risk and progression in order to identify those at highest risk because of gene carrier status, environmental exposures, or a combination of both. She is the Principal Investigator (PI) of the National Cancer Institute (NCI)-funded international 24-center WECARE (for Women's Environmental Cancer Radiation and Epidemiologic) Study which was specifically designed to examine the interaction of radiation exposure and genetic predisposition in breast cancer, especially radiation-associated contralateral breast cancer (CBC) among 3700 women with CBC and unilateral breast cancer. In addition, Dr. Bernstein has been PI of several NCI-funded research projects. She currently serves as a member of the Board of Directors of the American College of Epidemiology (ACE), the External Advisory group for the NCI-sponsored Breast Cancer Family Registry (B-CFR), the National Council on Radiation Protection and Measurements (NCRP), the Steering Committee of the Molecular Epidemiology Group of the American Association of Cancer Research, and recently the NCI Board of Scientific Counselors- Clinical Sciences and Epidemiology (BSC). For the past two years, she has served on the Organizing Committee of the American Statistical Association Conference on Radiation and Health (2012 and 2014 meetings), and was Co-Chair of the 3rd North American Congress of Epidemiology, held in June 2011 for which she was honored by the 2012 American College of Epidemiology Award for Leadership and Service in Epidemiology. In addition, Dr. Bernstein has served as a member of numerous grant reviews for the National Institutes of Health, the U.S. Department of Defense, and the Veterans Administration.

Bolch, Wesley E.

University of Florida

Dr. Wesley E. Bolch is Professor of Biomedical Engineering and Medical Physics in the J. Crayton Pruitt Family Department of Biomedical Engineering at the University of Florida (UF). He serves as Director of ALRADS – the Advanced Laboratory for Radiation Dosimetry Studies at UF, and has affiliate faculty appointments within the Departments of Pediatrics (College of Medicine) and Small Animal Clinical Sciences (College of Veterinary Medicine). Prior to 2011, Dr. Bolch held positions of Associate Professor (1995 to 2001) and Professor (2001 to 2011) within the UF Department of Nuclear & Radiological Engineering at UF, and served as the Director of the Health Physics Graduate Program from 2000 to 2010. Prior to his arrival at the University of Florida, he was Assistant Professor (1988 to 1994) and then Associate Professor (1994-1995) within the Department of Nuclear Engineering at Texas A&M University and Director of their health physics graduate program. Dr. Bolch earned his BSE degree in environmental engineering in 1984, his ME degree in radiological physics in 1986, and his PhD degree in radiological physics in 1988 from the University of Florida. His MS and PhD studies were supported under the DOE Health Physics Fellowship program, and were supervised by Dr. James E. Turner of the Health and Safety Research Division of the Oak Ridge National Laboratory from 1985 to 1988. His dissertation work was in the field of microdosimetry and computational modeling of free radical molecular interactions. In 2011, Dr. Bolch was elected Fellow of both the Health Physics Society (HPS) and the American Association of Physicists in Medicine (AAPM). He has been a member of the Society of Nuclear Medicine's Medical Internal Radiation Dose (MIRD) Committee since 1993, a member of the National Council on Radiation Protection and Measurements (NCRP) since 2005, and a member of Committee 2 of the International Commission on Radiological Protection (ICRP) since 2005. Within the latter, he serves as C2 Secretary and Leader of the ICRP Task Group on Dose Calculations (DOCAL). Other areas of professional service include serving as Associate Editor for Health Physics, Editorial Board Member for The Journal of Nuclear Medicine and Radiation Environmental Biophysics, and Member of the International Advisory Board for Physics in Medicine and Biology. He has published over 160 peer-reviewed journal articles and co-authored/edited 14 books/book chapters. He is a co-author on NCRP Reports No. 161 and 164, ICRP Publications 110 and 116, and MIRD Committee Monographs on Head/Brain Dosimetry and Cellular Dosimetry. Dr. Bolch manages a broad research program including (1) projects to construct high-resolution models of the skeleton to support dose-response studies in radionuclide therapy and radiation epidemiology, (2) projects to develop scalable NURBS-based and voxel-based computational phantoms of adult and pediatric patients and associated software for organ dose assessment in nuclear medicine, computed tomography, interventional fluoroscopy, and radiotherapy, (3) projects to develop stereotactic kilovoltage x-ray treatments for age-related macular degeneration and glaucoma, and (4) projects in stochastic modeling of worker inhalation and gamma-ray exposures following radiological accidents and potential terrorist events. Over the past three years, his core research activities have been funded by the National Cancer Institute, National Institute for Biomedical Imaging and Bioengineering, the US Department of Energy, and the Centers for Disease Control and Prevention, with additional funding from the Air Force Research Laboratory, Oraya Therapeutics, Inc., and the European Union. Since 1988, Dr. Bolch has taught courses in radiation dosimetry, nuclear instrumentation and detection, radiation shielding, radiological dose assessment, and biomedical engineering instrumentation. Since 1988, Dr. Bolch has mentored 4 postdoctoral research associates, and has graduated 51 MS students and 33 PhD students, 12 of whom are serving in academic positions in either the United States or the Republic of Korea.

Brenner, David

Columbia University Center for Radiological Research

Dr. David Brenner is the Director of the Columbia University Center for Radiological Research. He is also the Principal Investigator of the Center for High-Throughput Minimally-Invasive Radiation Biodosimetry, a multi-institute consortium developing technologies to rapidly test individual radiation exposures after a large-scale radiological event, on a mass scale. Dr. Brenner holds a B.A. and M.A. in Physics and Philosophy from Oxford University, an M.Sc. in Radiation Physics from the University of London, and a Ph.D. in Physics from the University of Surrey. He divides his research time between the effects of high doses of ionizing radiation (relating to radiation therapy) and the effects of low doses of radiation (relating to radiological, environmental and occupational exposures): At low doses, Dr. Brenner studies approaches and uncertainties associated with quantitative radiation risk assessment. At high doses, his original proposal to use small numbers of large radiotherapy doses to treat prostate cancer is increasingly being used in the clinic, with several successful randomized trials now completed. Dr. Brenner has published more than 270 peer-reviewed papers. In addition, he is the author of two books on radiation for the lay person: "Making the Radiation Therapy Decision" and "Radon, Risk and Remedy". He is a recent recipient of the Failla gold medal, the annual award given by the Radiation Research Society for contributions to radiation research. Dr. Brenner currently serves on the National Academies Nuclear and Radiation Studies Board. His research has been supported by grants and contracts with government agencies, with core research support primarily being from the National Institutes of Health.

Cologne, John

Radiation Effects Research Foundation

Dr. John Cologne is Senior Scientist and former acting chief of the Department of Statistics at the Radiation Effects Research Foundation (RERF)in Hiroshima, Japan, where he has been involved in radiation research and risk assessment since obtaining his Ph.D. in Biostatistics from the University of Washington in Seattle in 1989. Prior to that he received an M.S. in Mathematical Statistics from the University of California, San Diego and a B.A. in Biology from the University of California, Los Angeles. In addition to a number of publications in the statistical and epidemiological literature on the topics of study design, sample selection, and statistical methods of analysis for observational studies in public and environmental health, Dr. Cologne has published analyses of radiation effects on longevity and liver cancer incidence among Atomic-bomb Survivors and has collaborated with clinical and laboratory scientists in studies of gene-radiation interactions involving DNA-repair and immune-system-related genes, radiation effects on risk of chronic viral hepatitis infection, and biomarkers of immune function and chronic inflammation related to radiation risk for cancers of the liver, breast, stomach, and colon. His current interests lie primarily in two areas. One is developing methods of genomic data analysis based on cellular pathways and networks. Another is communicating risk from the standpoint of understanding uncertainty in probability of causation estimated through causal models, accounting for exposures to other risk factors. Striving to build stronger ties among basic laboratory scientists, medical researchers, epidemiologists, and statisticians, Dr. Cologne organized and led a multi-disciplinary working group focused on bioinformatics and research issues related to genome-wide association studies and pathway/network models at the RERF. His research funding is provided by the Radiation Effects Research Foundation (RERF), Hiroshima and Nagasaki, Japan, a private, non-profit foundation funded by the Japanese Ministry of Health, Labour and Welfare (MHLW) and the U.S. Department of Energy (DOE), the latter in part through a DOE Award to the U.S. National Academy of Sciences.

Dauer, Lawrence T.

Memorial Sloan-Kettering Cancer Center

Dr. Lawrence T. Dauer is a Medical Health Physicist specializing in radiation protection at Memorial Sloan-Kettering Cancer Center. He holds appointments in both the Department of Radiology and Department of Medical Physics, and serves as the Radiation Safety Manager and Chair of the Emergency Management Committee. Dr. Dauer has spent more than 25 years in the field of radiation protection and health physics, including radiation protection programs for the energy and industrial sectors and operations and research in medical health physics. His research interests are associated with radiation protection in the fields of radiology, x-ray imaging, nuclear medicine, and radiation oncology, as well as surgery and medicine. His research activities focus on novel techniques utilizing radioactive materials and radiation producing devices and is aimed at facilitating the translation of results into improved radiation protection practices that maximize medical benefits to patients while enabling the expansion of successful clinical programs. Dr. Dauer earned a BS in Biology and Chemistry from Mount St. Mary College in NY, an MS in Health Physics from the Georgia Institute of Technology, and a PhD in Adult Education from Capella University. He is a Diplomat of the American Board of Health Physics certified in comprehensive health physics and a Licensed Medical Physicist in New York State. He served as Chair of the Radiation Safety Committee of the American Association of Physicists in Medicine, President and Executive Council Member of the Medical Physics Section of the Health Physics Society, President of the Greater NY Chapter of the Health Physics Society, and Board Member of the Radiological and Medical Physics Society of NY. He is currently a council member of the National Council on Radiation Protection and Measurements (NCRP), a member of the International Commission on Radiological Protection ICRP) Committee 3–Radiation Protection in Medicine, and a member of the Science Committee of the International Organization for Medical Physics (IOMP). He is currently a member of the Institute of Medicine/National Academies Committee on Research Directions in Human Biological Effects of Low Level Ionizing Radiation and has served as a consultant to the International Atomic Energy Agency (IAEA). To date, Dr. Dauer has received no external research funding from either government agencies, private companies, or foundations.

Hoel, David G.

Medical University of South Carolina

Dr. David G. Hoel is a Distinguished University Professor in the Department of Medicine at the Medical University of South Carolina in Charleston and Principal Scientist at Exponent, Inc. He received an A.B. in Mathematics and Statistics from University of California at Berkeley, a PhD in Mathematical Statistics from University of North Carolina in Chapel Hill and was a post-doctoral fellow in preventive medicine at Stanford University. Prior to joining the Medical University of South Carolina Dr. Hoel was Division Director for Risk Assessment at the National Institute of Environmental Health Sciences in N.C. Dr. Hoel is a Fellow of the American Association for the Advancement of Science, a member of the Institute of Medicine of the National Academies and a National Associate of the National Academies. His awards include the Spiegleman Gold Medal in Public Health and the Ramazzini Award in Environmental and Occupational Health. He has served on numerous governmental and National Academy committees including the Environmental Health Committee and the Radiation Advisory Committee of EPA's Science Advisory Board and the BEIR V committee of the National Academy of Sciences. He was a member of IARC's committee on ionizing radiation (report 100D) and contributed to the United Nations' UNSCEAR report 2006. Dr. Hoel's research has focused on risk assessment methods with particular interest in low-dose radiation exposures and cancer. This work has included stays in Hiroshima as a Director at Radiation Effects Research Foundation (RERF) and currently is a RERF Scientific Counselor. He until this last year he was a member of National Academies' Board on Nuclear and Radiation Studies. Finally he has testified several times in both the House and Senate on human health issues. Dr. Hoel has received no recent external research funding from either government agencies, private companies, or foundations.

Lee, Patricia L.

Savannah River National Laboratory

Dr. Patricia L. Lee is Manager of Applied Computational Engineering and Statistics at the Savannah River National Laboratory (SRNL). She has been managing a multi-disciplinary computational research and development (R&D) group at SRNL since 2009. Prior technical expertise includes more than 20 years of research and development including 8 years at the Centers for Disease Control and Prevention. Her primary focus at the CDC was working on environmental dose reconstructions and epidemiologic studies for areas surrounding Department of Energy (DOE) facilities. Dr. Lee received a B.S. in Physics from Lincoln University (PA) and a Ph.D. in Nuclear Engineering/Health Physics from the Georgia Institute of Technology. Her current staff consists of Statisticians and Mechanical, Nuclear, and Chemical Engineers working in the areas of Performance Assessment and Groundwater Modeling, Computational Fluid Dynamics, Heat Transfer, Applied Statistics, Radiation Transport, and Structural Analysis, providing solutions for the safe disposition and disposal of radioactive waste, decommissioning of legacy contaminated facilities, and national security. Dr. Lee's technical expertise is focused in radiological dose and risk assessment, environmental dose reconstruction, decommissioning and consequence management analysis. During her first 9 years at SRNL, she served as the subject matter expert for the Rad NESHAPs modeling at SRS and co-authored the dose chapter for the Annual Environmental Report. Dr. Lee has held numerous leadership positions in the Health Physics Society including Board of Directors membership from 2009 to 2012. She was a member of the Department of Health And Human Services Federal Advisory Committee Act Committee, Citizens Advisory Committee on Public Health Service Activities and Research at (DOE) Sites from 2002 to 2006. In her role as a Visiting Professor at South Carolina State University, she was instrumental in securing ABET accreditation of the first new Nuclear Engineering program in over 30 years. Dr. Lee is well published in the open literature and government sector on the topics of radiological dose and risk assessment; decontamination, decommissioning and radioactive waste performance assessment protocols; atmospheric dispersion modeling for chronic and acute environmental releases; and ingestion dose methods for consequence management. Dr. Lee has received no external research funding from either government agencies, private companies, or foundations.

Mackenzie, Donald N.

Mackenzie Consulting

Mr. Donald N. Mackenzie is the principal at Mackenzie Consulting providing consulting services to private and state and federal government agencies, offering project management and subject matter expertise in radiation protection, Deactivation and Decommissioning (D&D), and environmental remediation. Mr. Mackenzie holds a B.S. in Conservation and Resource Development from the University of Maryland and completed course work towards a Master's degree in Environmental Biology from Hood College. He has 30 year experience in health physics, D&D project management, and formulating policy and guidance in the radiation protection and D&D areas for the Department of Energy, the Nuclear Regulatory Commission, the State of North Carolina and private industry. Until December 2010 he was in the Office of D&D (Deactivation and Decommissioning) and Facility Engineering in the Office of Environmental Management (EM) at the Department of Energy, prior to that he served as a health physicist and West Valley Demonstration Project liaison for the EM Office of Site Support and Small Projects for 3 years. Overall, Mr. Mackenzie was in the EM Headquarters program for 20 years working on different programs and sites including; the Formerly Utilized Sites Remedial Action Program (FUSRAP), Monticello remedial action project, and the Hanford, Argonne National Laboratory and Brookhaven National Laboratory D&D programs. While supporting the Monticello remedial action project he was responsible for the review and evaluation of the vicinity property radiological surveys to include vicinity properties for remedial action. During 1992-1998, Mr. Mackenzie managed the Independent Verification Program for EM's Office of Northwestern Area Programs that covered all D&D and remedial action projects at the Hanford, Idaho, Oakland and Chicago sites. The Independent Verification Program provided independent radiological surveys and evaluation of projects meeting their radiological cleanup criteria. As a health physicist at the Nuclear Regulatory Commission, during 1986-1990, Mr Mackenzie performed licensing of radioactive materials licensees in the Office of Nuclear Materials Safety and Safeguards and evaluations of agreement states programs in the Office of Agreement States Programs. From 1982-1986 he was a health physicist for the North Carolina Radiation Protection Section where he performed licensing and inspections of radioactive materials licensees in the State of North Carolina. Mr. Mackenzie has received no external research funding from either government agencies, private companies, or foundations.

McBaugh, Debra

Independent Consultant

Ms. Debra McBaugh is currently an independent consultant with over 30 years' experience as a manager, project leader, and individual contributor over a broad range of health physics topics including licensing and inspection of facilities using radioactive material, oversight of environmental radiation surveillance programs, and preparing for and participating in radiological exercises at both commercial and federal nuclear facilities. Ms. McBaugh also prepared for and participated in TOPOFF2, a national emergency response exercise involving a radiological dispersal device. In 2006, Ms. McBaugh was elected to the National Council on Radiation Protection and Measurement (NCRP). She served on their Board of Directors for 6 years. She was a member of NCRP Scientific Committee 2-2 that wrote a report for decision makers on response to radiological and nuclear incidents (RDDs and INDs.) She is currently a member of Scientific Committee 5-1 writing a report on long-term recovery from radiological and nuclear incidents. Ms. McBaugh has been active in the Conference of Radiation Control Program Directors as well as the Health Physics Society. She is currently the president of the Health Physics Society Homeland Security Section. Ms. McBaugh has a B.S. in Physics (1977) from the University of Washington, an M.S. in Radiological Sciences (1990) from the University of Washington and is certified by the American Board of Health Physics. Ms. McBaugh has received no external research funding from either government agencies, private companies, or foundations.

Pinney, Susan M.

University of Cincinnati

Dr. Susan M. Pinney is a Professor in the Department of Environmental Health in the College of Medicine, University of Cincinnati. She holds a B.S. in Nursing from the University of Pennsylvania, an M.S. in Nursing from the University of Michigan, and a Ph.D. in Epidemiology from the University of Cincinnati. Prior to earning a Ph.D. in Epidemiology in 1990, Dr. Pinney earned an M.S. in Nursing in 1972 and practiced nursing until 1981. She has conducted research in the area of environmental epidemiology for the last 25 years. Dr. Pinney's initial studies were in occupational settings, where job history, work zone location and industrial hygiene monitoring data often provide the information needed to do retrospective exposure information. Over the last 20 years, she has applied the methods used in occupational exposure estimation to persons exposed in a community setting. Dr. Pinney has measured biomarkers of exposure in multiple studies, as tool to estimate internal exposure. She has conducted studies incorporating exposure biomarkers of radiation, uranium, cotinine, phenols, phthalates, phytoestrogens, organochlorides, and most recently, the perfluoroalkyl chemicals (PFCs) including perfluorooctanoate (PFOA), and has developed methods for incorporating environmental biomarker measurements into models for estimating exposure. Dr. Pinney is the environmental epidemiologist for the Cincinnati puberty study of the National Cancer Institute (NCI)/National Institute of Environmental Health Sciences (NIEHS) funded Breast Cancer and Director of the Breast Cancer Registry of Greater Cincinnati. In studies conducted by Dr. Pinney, measurements of PFCs in serum of 353 girls in the Cincinnati cohort and 351 girls in the San Francisco Bay area have been associated with alterations in the timing of pubertal events (unpublished data). She also has been funded by NIEHS to sample environmental biomarkers in persons living in towns upriver from Cincinnati, and for whom the Ohio River is a source of drinking water, processed through various water treatment systems. Since 1990 Dr. Pinney has been the chief epidemiologist for the Fernald Community Cohort (FCC), responsible for questionnaire design and data collection, database design, and creation of a biospecimen repository for almost 10,000 cohort members living close to a uranium refinery. She has led work on uranium and radiation exposure characterization within this cohort, and in 2011 was funded by the U.S. Environmental Protection Agency to conduct an exposure assessment study of PFCs using stored serum of FCC cohort members. Dr. Pinney currently is the Deputy Director of the NIEHS funded Center for Environmental Genetics at the University of Cincinnati. From 1996-2001, she served as a member of the Citizens Advisory Committee on Public Health Service Activities and Research at Department of Energy Sites: Fernald Health Effects Sub-Committee, sponsored by the Centers for Disease Control and Prevention (CDC), Department of Health and Human Services. Prior to that, she served as a member of the Hanford Medical Monitoring Work Group of the Agency for Toxic Substances and Disease Registry (1996-1997). Currently, Dr. Pinney is a permanent member of the Environmental Health Sciences (NIEHS) committee for reviewing applications for center grants and training grants.

Williams, Jacqueline

University of Rochester Medical Center

Dr. Jacqueline Williams is a Professor of Radiation Oncology at the University of Rochester Medical Center and is a Fellow of the American Society for Radiation Oncology. She has served as a member of the Advisory Council for the National Space Biomedical Research Institute and as chair of the Scientific Advisory Committee for the Center for Acute Radiation Research, and is a council member on the National Council on Radiation Protection and Measurements. Dr. Williams is a member of the editorial boards of the International Journal for Radiation Biology and the Journal of Gastrointestinal Oncology and has served as President of the Radiation Research Society, as well as chair of the Scientific Council on the board of the American Society for Radiation Oncology. She received her B.Sc. in Zoology/Pharmacology at the University of Nottingham, and Ph.D. in Radiation Biology at the University of London, where her work focused on the risks of carcinogenesis from radiation particulates in the nuclear power industry. More recently, Dr. Williams's research has been in the area of radiation-induced normal tissue effects, where she is now nationally and internationally recognized for her work and teaching in this field. Specific areas of research include: mechanisms of initiation and progression of radiation-induced lung injury following high dose (therapeutic) and low dose irradiation; role of inflammatory pathways in radiation-induced brain disease, including cognitive dysfunction and exacerbation of Alzheimer's disease, as a risk of space irradiation; development of mitigating protocols following mass exposure to external and internal irradiation and/or contamination. Dr. Williams' research has been supported by grants from and contracts with government agencies and private companies, with core research support primarily from the federal government (National Institute for Allergy and Infectious Diseases [NIAID] and the Biomedical Advanced Research and Development Authority [BARDA]), with additional support from National Aeronautics and Space Administration and Apceth Corporation.

Wong, F. Lennie

City of Hope National Medical Center

Dr. F. Lennie Wong is an Associate Professor in the Department of Population Sciences at the City of Hope National Medical Center and also a member of the City of Hope Comprehensive Cancer Center in Duarte, CA. She received her B.S. in Math/Applied Sciences from UCLA and her M.S. and Ph.D. in Biostatistics from the Fielding School of Public Health at UCLA. She worked at the Radiation Effects Research Foundation in Hiroshima, Japan during 1988-1992 as a Research Scientist and also on contract during 1997-2002 to study the longitudinal effects of exposure to Atomic-bomb radiation on the incidence of non-cancer diseases and on longitudinal biological measurements such as cholesterol and hemoglobin levels. She also served as a senior staff fellow at the Radiation Epidemiology Branch of the National Cancer Institute where she was involved in studies investigating the long-term effects of exposure to therapeutic radiation in various patient populations. During 2002-2010, she has served as the Chair of the Leukemia Advisory Group in the National Cancer Institute Chernobyl Research Program. Dr. Wong is currently involved in follow-up studies of the patients who had undergone hematopoietic cell transplantation at City of Hope to investigate the relationship between treatment and long-term complications. Another of her research interest involves evaluating the cost-effectiveness of screening programs recommended for childhood cancer survivors for early detection and treatment of complications. Dr. Wong's research has been supported in part by grants from the National Institute of Health.